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Nguyen et al.

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(54) **VERBENA PLANT NAMED ‘BALCADETLU’**

CPC A01H 5/02; A01H 5/00; A01H 6/86
See application file for complete search history.

(50) Latin Name: *Verbena* hybrid
Varietal Denomination: **Balcaдетlu**

(56) **References Cited**

(71) Applicant: **Ball Horticultural Company**, West
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PUBLICATIONS

(72) Inventors: **Phuong N. Nguyen**, Thousand Oaks,
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(73) Assignee: **Ball Horticultural Company**, West
Chicago, IL (US)

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(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

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(21) Appl. No.: **16/501,922**

Primary Examiner — June Hwu

(22) Filed: **Jul. 3, 2019**

(74) Attorney, Agent, or Firm — Audrey Charles

(51) **Int. Cl.**
A01H 5/02 (2018.01)
A01H 6/86 (2018.01)

(57) **ABSTRACT**

(52) **U.S. Cl.**
USPC **Plt./306**

A new and distinct cultivar of *Verbena* plant named ‘Bal-
cadetlu’, characterized by its dark violet-colored flowers,
medium green-colored foliage, and moderately vigorous,
compact-upright growth habit, is disclosed.

(58) **Field of Classification Search**
USPC **Plt./308**

1 Drawing Sheet

1

2

Latin name of genus and species of plant claimed: *Ver-
bena* hybrid.
Variety denomination: ‘Balcaдетlu’.

Chicago, Ill. has demonstrated that the new cultivar repro-
duces true to type with all of the characteristics, as herein
described, firmly fixed and retained through successive
generations of such asexual propagation.

BACKGROUND OF THE INVENTION

SUMMARY OF THE INVENTION

The present invention relates to a new and distinct cultivar
of *Verbena* plant botanically known as *Verbena* hybrid and
hereinafter referred to by the cultivar name ‘Balcaдетlu’.

The following characteristics of the new cultivar have
been repeatedly observed and can be used to distinguish
‘Balcaдетlu’ as a new and distinct cultivar of *Verbena* plant:

The new cultivar originated in a controlled breeding
program in Arroyo Grande, Calif. during May 2015. The
objective of the breeding program was the development of
Verbena cultivars that have a compact-upright growth habit.

1. Dark violet-colored flowers;
2. Medium green-colored foliage; and
3. Moderately vigorous, compact-upright growth habit.

The new *Verbena* cultivar is the result of cross-pollina-
tion. The female (seed) parent of the new cultivar is the
proprietary *Verbena* hybrid breeding selection coded
PN10658-1, not patented, characterized by its light purple-
colored flowers, medium green-colored foliage, and moder-
ately vigorous, compact-upright growth habit. The male
(pollen) parent of the new cultivar is the proprietary *Verbena*
hybrid breeding selection coded PN10556-1, not patented,
characterized by its light purple-colored flowers, medium
green-colored foliage, and moderately vigorous, compact-
upright growth habit. The new cultivar was discovered and
selected as a single flowering plant within the progeny of the
above stated cross-pollination during April 2016 in a con-
trolled environment in Arroyo Grande, Calif.

Plants of the new cultivar differ from plants of the female
and male parents primarily in having a darker flower color.

Of the many commercially available *Verbena* cultivars,
the most similar in comparison to the new cultivar is Cadet
Upright Lavender Blue ‘Balcaдетlu’, U.S. Plant Pat. No.
30,608. However, in side-by-side comparisons, plants of the
new cultivar differ from plants of ‘Balcaдетlu’ in at least the
following characteristics:

1. Plants of the new cultivar have flowers with more violet
coloration than plants of ‘Balcaдетlu’; and
2. Plants of the new cultivar have more florets per
inflorescence than plants of ‘Balcaдетlu’.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

Asexual reproduction of the new cultivar by terminal stem
cuttings since April 2016 in Arroyo Grande, Calif., and West

The accompanying photographs show, as nearly true as it
is reasonably possible to make the same in color illustrations

of this type, typical flower and foliage characteristics of the new cultivar. Colors in the photographs may differ slightly from the color values cited in the detailed description, which accurately describes the colors of 'Balcadetlu'. The plants were approximately 3 months old and grown in 6-inch pots for approximately 8 weeks in a greenhouse in West Chicago, Ill. Plants were given one pinch at transplant.

FIG. 1 illustrates a side view of the overall growth and flowering habit of 'Balcadetlu'.

FIG. 2 illustrates a close-up view of an individual inflorescence of 'Balcadetlu'.

DETAILED BOTANICAL DESCRIPTION

The new cultivar has not been observed under all possible environmental conditions to date. Accordingly, it is possible that the phenotype may vary somewhat with variations in the environment, such as temperature, light intensity, and day length, without, however, any variance in genotype.

The chart used in the identification of colors described herein is The R.H.S. Colour Chart of The Royal Horticultural Society, London, England, 2015 edition, except where general color terms of ordinary significance are used. The color values were determined in March 2019 under natural light conditions in West Chicago, Ill.

The following descriptions and measurements describe approximately 3-month old plants produced from cuttings from stock plants and grown in a glass-covered greenhouse under conditions comparable to those used in commercial practice. The plants were grown in West Chicago, Ill. in 6-inch pots for approximately 8 weeks utilizing a soilless growth medium. Plants were given one pinch at transplant. Greenhouse temperatures were maintained at approximately 67° F. to 72° F. (19° C. to 22° C.) during the day and approximately 65° F. to 68° F. (18° C. to 20° C.) during the night. Supplemental lighting was used. Measurements and numerical values represent averages of typical plants. Botanical classification: *Verbena* hybrid 'Balcadetlu'.

Parentage:

Female parent.—Proprietary *Verbena* hybrid breeding selection coded PN10658-1, not patented.

Male parent.—Proprietary *Verbena* hybrid breeding selection coded PN10556-1, not patented.

Propagation:

Type cutting.—Terminal stem.

Time to initiate roots.—Approximately 6 to 9 days.

Time to produce a rooted cutting.—Approximately 24 to 28 days.

Root description.—Fibrous.

Rooting habit.—Freely branching.

Plant description:

Commercial crop time.—Approximately 5 to 7 weeks from a rooted cutting to finish in a 10 cm pot.

Growth habit and general appearance.—Moderately vigorous, compact-upright.

Size.—Height from soil level to top of plant plane: Approximately 17.5 cm. Width: Approximately 24.5 cm.

Branching habit.—Freely branching, pinching enhances basal branching. Quantity of main branches per plant: Approximately 6.

Branch.—Shape: Square in cross section. Strength: Strong. Length: Approximately 11.0 cm. Diameter: Approximately 3.0 mm. Length of central internode: Approximately 3.0 cm. Texture: Densely pubescent

with a mixture of glandular and nonglandular hairs. Gland color: Colorless, transparent. Color of young stems: 144A. Color of mature stems: 137B.

Foliage description:

General description.—Quantity of leaves per main branch: Approximately 8. Fragrance: None detected. Form: Simple. Arrangement: Opposite.

Leaves.—Aspect: Perpendicular to stem, obtuse angle with age. Shape: Ovate to oblong. Margin: Crenate. Apex: Broadly acute. Base: Truncate. Venation pattern: Pinnate. Length of mature leaf: Approximately 4.5 cm. Width of mature leaf: Approximately 3.4 cm. Texture of upper surface: Densely pubescent. Texture of lower surface: Densely pubescent with a mixture of glandular and nonglandular hairs. Gland color: Colorless, transparent. Color of upper surface of young and mature foliage: Closest to but darker than 137A with venation of 147C. Color of lower surface of young and mature foliage: Closest to 137B with venation of 147C.

Petiole.—Length: Approximately 7.0 mm. Diameter: Approximately 2.0 mm. Texture: Densely pubescent with a mixture of glandular and nonglandular hairs. Gland color: Colorless, transparent. Color: 147C to 147D.

Flowering description:

Flowering habit.—'Balcadetlu' is freely flowering under outdoor growing conditions with substantially continuous blooming from spring through autumn and year-round in greenhouse environment.

Lastingness of individual flower on the plant.—Approximately 5 to 7 days.

Inflorescence description:

General description.—Type: Corymb. Shape: Hemispherical. Quantity per plant: Approximately 5. Fragrance: None detected. Length or height: 3.5 cm. Width: Approximately 6.0 cm. Quantity of fully open flowers per inflorescence: Approximately 18.

Peduncle.—Strength: Strong. Aspect: Erect. Length: Approximately 3.0 cm. Diameter: Approximately 2.0 mm. Texture: Densely pubescent with a mixture of glandular and nonglandular hairs. Gland color: Colorless, transparent. Color: 137B.

Flower description:

General description.—Type: Sessile, salverform.

Bud.—Rate of opening: Generally takes 2 to 3 days for bud to progress from first color to fully open flower. Quantity of unopened inflorescences per plant: Approximately 5.

Bud just before opening.—Shape: Elongated, globular at apex. Length: Approximately 1.3 cm. Diameter: Approximately 3.0 mm. Color: Petal portion N88A, sepal portion 137B.

Corolla.—Shape: Round. Diameter: Approximately 2.1 cm. Depth: Approximately 3.2 cm.

Petals.—Quantity: 5, fused at base forming a tube. Shape: Obovate. Arrangement: Touching to overlapping. Appearance: Dull. Margin: Entire, weak undulation. Apex: Emarginate. Length of upper petals from tube: Approximately 9.0 mm. Width of upper petals: Approximately 8.0 mm. Length of lateral petals from tube: Approximately 9.0 mm. Width of lateral petals: Approximately 9.0 mm. Length of lower petal from tube: Approximately 1.0 cm. Width of lower petal: Approximately 1.0 cm. Texture of

upper surface: Glabrous with glandular pubescent base. Gland color: N87A and colorless, transparent. Texture of lower surface: Sparsely pubescent with a mixture of glandular and nonglandular hairs. Gland color: Colorless, transparent. Color of upper surface when first and fully open: N87A tinted with N88A, NN155D at base on lower margins of lateral and lower petals. Color of lower surface when first and fully open: N87C with NN155D at base of lateral and lower petals. Color of whiskers surrounding the opening of the corolla tube: 94C.

Corolla tube.—Length: Approximately 1.9 cm. Diameter at proximal end: Approximately 1.0 mm. Diameter at distal end: Approximately 2.0 mm. Texture of outer surface: Upper half moderately glandular pubescent, lower half glabrous. Gland color: Colorless, transparent. Texture of inner surface: Densely pubescent. Color of outer surface: NN155B tinted with 145D at distal end. Color of inner surface: NN155B.

Calyx.—Shape: Tubular with 5 acute tips. Length: Approximately 1.1 cm. Width: Approximately 3.0 mm.

Sepals.—Quantity per flower: 5, fused at base. Shape: Linear. Apex: Acute. Length: Approximately 1.1 cm. Width: Approximately 1.0 mm. Texture of inner surface: Moderately pubescent. Texture of outer surface: Densely pubescent with a mixture of glandular and nonglandular hairs. Gland color: Mixture of N92C and colorless, transparent. Color of inner and outer surfaces: 137B.

Stipules.—Shape: Lanceolate. Apex: Acute. Length: Approximately 5.0 mm. Width at base: Approximately 1.0 mm. Texture of inner surface: Sparsely pubescent. Texture of outer surface: Densely pubescent with a mixture of glandular and nonglandular hairs. Gland color: Colorless, transparent. Color of inner and outer surfaces: 137A with 144A at base.

Reproductive organs.—Androecium: Stamen quantity: 4, didynamous. Stamen length of longer pair: Approximately 2.0 mm. Stamen length of shorter pair: Approximately 1.0 mm. Anther shape: Bilobed, ovoid. Anther length: Approximately 1.0 mm. Anther color: 145B. Pollen amount: Moderate. Pollen color: 1D. Gynoecium: Pistil quantity: 1 per flower. Pistil length: Approximately 1.9 cm. Stigma shape: Bifid. Stigma length: Less than 1.0 mm. Stigma color: 137A. Style length: Approximately 1.8 cm. Style color: 145D. Ovary diameter: Approximately 1.0 mm. Ovary texture: Glabrous. Ovary color: 144A.

Seed and fruit production: Neither seed nor fruit production has been observed.

Disease and pest resistance: Resistance to pathogens and pests common to *Verbena* has not been observed.

What is claimed is:

1. A new and distinct cultivar of *Verbena* plant named 'Balcadetlu', substantially as herein illustrated and described.

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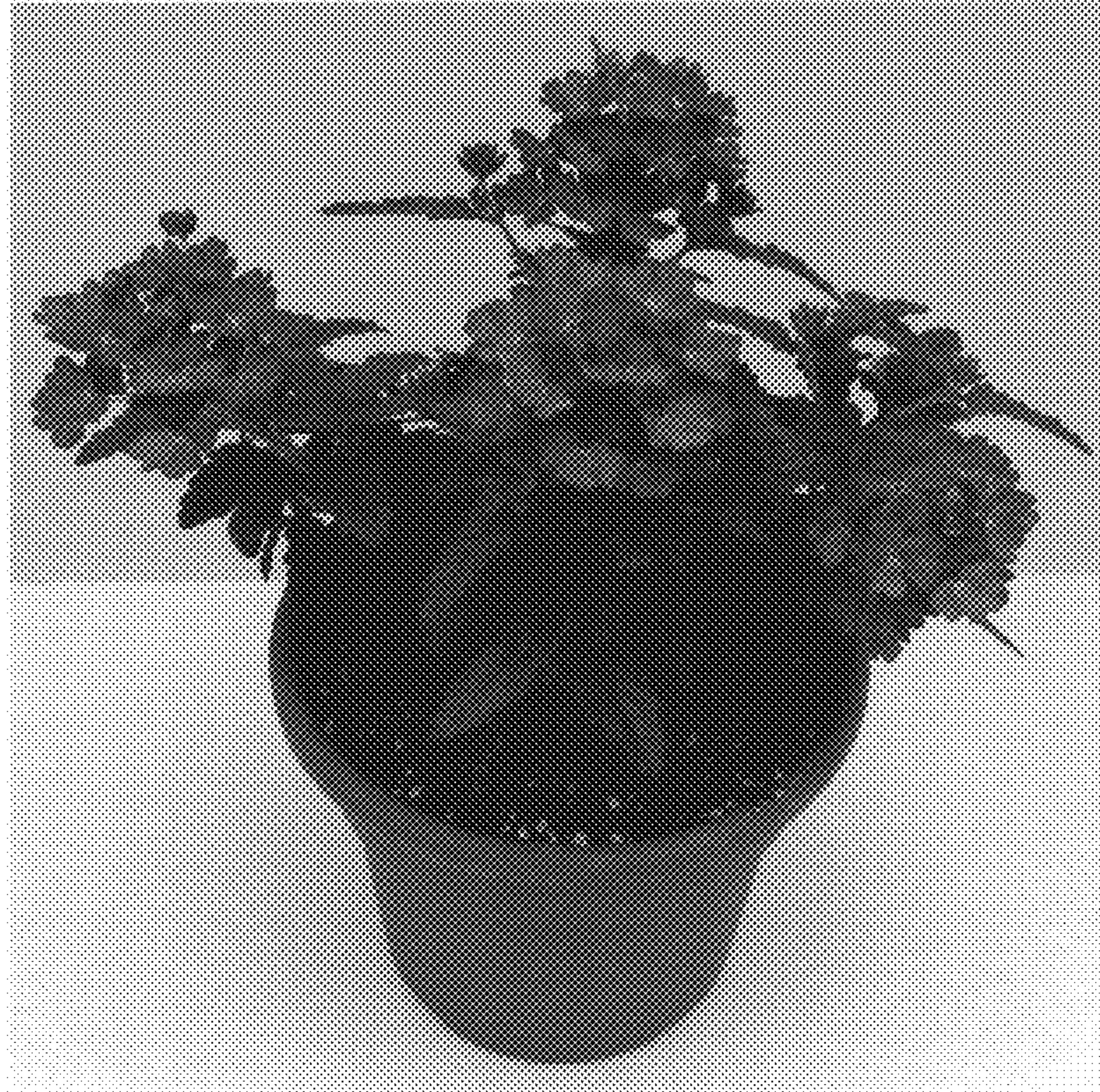


FIG. 1

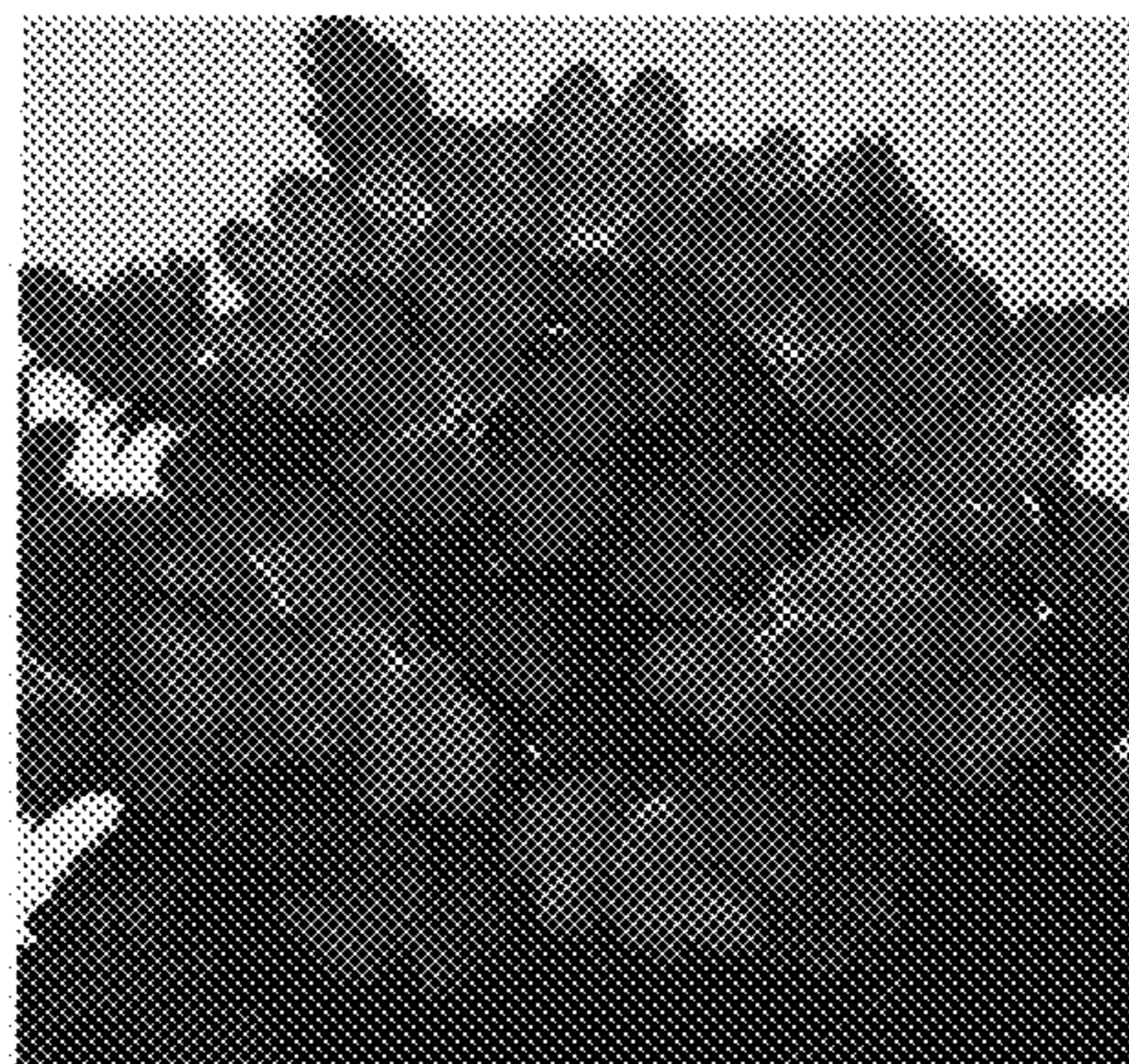


FIG. 2